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## TABLES

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**ABBREVIATIONS AND REPORTING UNITS FOR PHYSICAL PROPERTIES, CHEMICAL CONSTITUENTS, FECAL INDICATOR BACTERIA, NITROGEN ISOTOPIC COMPOSITION, AND NOTATIONS USED IN TABLE 2**

Q	Discharge, in cubic feet per second	mm/dd/yyyy	Month, day, year
T	Temperature, in degrees Celsius	--	No data
SC	Specific conductance, in microsiemens per centimeter at 25 degrees Celsius	P	Poultry well open only or mostly to the Springfield Plateau aquifer, with poultry litter application in spring 2000 and in previous years
DO	Dissolved oxygen, in milligrams per liter	P1	Data for P well sampled in May 2000 and used for statistical tests
pH	In standard units	<	Less than
NO <sub>2t</sub> +NO <sub>3t</sub>	Total nitrite plus nitrate as nitrogen, in milligrams per liter	P(old)	Poultry well open only or mostly to the Springfield Plateau aquifer, with poultry litter application only in years before 2000
NO <sub>2t</sub>	Total nitrite as nitrogen, in milligrams per liter	*	Sample results not used for statistical tests
NH <sub>3t</sub>	Total ammonia as nitrogen, in milligrams per liter	P(deep)	Poultry well too deep to be open only or mostly to the Springfield Plateau aquifer
P <sub>t</sub>	Total phosphorus, in milligrams per liter	P2	Data for P well sampled in October or November 2000 and used for statistical tests
PO <sub>4t</sub>	Total orthophosphorus as phosphorus, in milligrams per liter	Ag(deep)	Agriculture well too deep to be open only or mostly to the Springfield Plateau aquifer
FC	Fecal coliform density, in colonies per 100 milliliters	Ag	Agriculture well open only or mostly to the Springfield Plateau aquifer
<i>E. coli</i>	<i>Escherichia coli</i> density, in colonies per 100 milliliters	Ag1	Data for Ag well sampled in May 2000 and used for statistical tests
FS	Fecal streptococcus density, in colonies per 100 milliliters	Ag2	Data for Ag well sampled in October or November 2000 and used for statistical tests
Alk <sub>(it)</sub>	Total acid neutralizing capacity, incremental titration, in milligrams per liter	Sp	Spring
HCO <sub>3(it)</sub>	Bicarbonate, total, incremental titration, in milligrams per liter	Sp1	Data for spring sampled in May 2000 and used in statistical tests
CO <sub>3(it)</sub>	Carbonate, total, incremental titration, in milligrams per liter	>	Greater than
Solids	Dissolved solids, in milligrams per liter	Sp2	Data for spring sampled in October or November 2000 and used for statistical tests
Hard	Hardness, total, in milligrams per liter as CaCO <sub>3</sub>		
Ca	Calcium, dissolved, in milligrams per liter		
Mg	Magnesium, dissolved, in milligrams per liter		
K	Potassium, dissolved, in milligrams per liter		
Na	Sodium, dissolved, in milligrams per liter		
Cl	Chloride, dissolved, in milligrams per liter		
F	Fluoride, dissolved, in milligrams per liter		
SO <sub>4</sub>	Sulfate, dissolved, in milligrams per liter		
B	Boron, dissolved, in micrograms per liter		
Sr	Strontium, dissolved, in micrograms per liter		
δ <sup>15</sup> N	Nitrogen-15 isotopic composition, as ‰ (per mil)		

**Table 1.** Site type, well-construction data, and water-level data for wells in the sample network

[OZA, Ozark aquifer; mm/dd/yyyy, month, day, year; P, poultry well open only or mostly to Springfield Plateau aquifer, with poultry litter application in spring 2000 and in previous years; SPA, Springfield Plateau aquifer; --, no data; SPA/OZA, Springfield Plateau aquifer and Ozark aquifer; P(old), poultry well open only or mostly to Springfield Plateau aquifer, with poultry litter application only in years prior to 2000; P(deep), poultry well too deep to be open only or mostly to the Springfield Plateau aquifer; approx, approximate value provided by well owner; ?, questionable; >, greater than; Ag(deep), agriculture well too deep to be open only or mostly to the Springfield Plateau aquifer; Ag, agriculture well open only or mostly to Springfield Plateau aquifer; ALLUV, alluvium; all depths in feet below land surface]

Well number	Site type	Well depth	Casing depth	Aquifer open to well	Estimated interval of well open to OZA (feet)	Depth to water	Date of water-level measurement (mm/dd/yyyy)
1	P	200	105	SPA	0	66.2	05/02/2000
2	P	357	85	SPA	0	--	--
3	P	370	--	SPA/OZA	20	--	--
4	P	110	--	SPA	0	81.8	05/03/2000
5	P	330	84	SPA	0	153.3	05/09/2000
6	P(old)	323	126	SPA	0	--	--
7	P	430	150	SPA/OZA	90	152.1	05/05/2000
8	P(deep)	approx 550	--	OZA	all ?	>300	05/03/2000
9	P(old)	280	--	SPA	0	--	--
10	P(old)	approx 70	--	SPA	0	28.3	05/03/2000
11	P	270	--	SPA	0	--	--
12	P(old)	280	60	SPA	0	--	--
13	P	approx 350	--	SPA/OZA	20	--	--
14	P	approx 375	--	SPA/OZA	100	--	--
15	P	232	80	SPA	0	--	--
16	P	310	126	SPA/OZA	65	64.6	05/09/2000
17	P	approx 330	--	SPA	0	149.0	05/04/2000
18	P	approx 350	--	SPA/OZA	50	--	--
19	Ag(deep)	330	260	OZA	70	50.3	05/17/2000
20	P	330	84	SPA/OZA	20	116.3	05/18/2000
21	Ag	382	169	SPA/OZA	30	--	--
22	Ag	425	35	SPA/OZA	50	90.3	05/18/2000
23	P	200	80	SPA	0	109.2	05/10/2000
24	Ag	approx 180	--	SPA	0	--	--
25	P	400	--	SPA/OZA	100	--	--
26	P	approx 250	--	SPA	0	--	--
27	Ag	27	--	ALLUV	0	--	--
28	P	365	105	SPA	0	--	--
29	Ag	90	--	SPA	0	--	--
30	Ag	156	--	SPA	0	--	--
31	P	180	--	SPA	0	--	--
32	Ag	approx 250	--	SPA	0	--	--
33	Ag	360	approx 50	SPA/OZA	80	--	--
34	Ag	--	--	SPA ?	0	--	--
35	Ag	--	--	SPA ?	0	57.0	05/11/2000
36	Ag	--	--	SPA ?	0	--	--
37	P(deep)	540	--	SPA/OZA	220	--	--
38	Ag	200	--	SPA	0	--	--
39	P	100	--	SPA	0	--	--
40	Ag	approx 300	--	SPA	0	--	--
41	Ag	100	approx 20	SPA	0	--	--
42	P	450	--	SPA/OZA	100	--	--
43	P	approx 250	--	SPA	0	--	--
44	Ag	150	--	SPA	0	--	--
45	P	270	--	SPA	0	64.0	05/18/2000
46	P	440	--	SPA/OZA	120	--	--
47	P	285	--	SPA	0	--	--

**Table 2.** Site type, sample group, physical properties, concentrations of chemical constituents, fecal indicator bacteria densities, and nitrogen isotopic composition in water samples from wells and springs

Well or spring number (fig. 3)	Spring name	Site type	Sample date (mm/dd/yyyy)	Sample group	Q	T	SC	DO	pH	NO <sub>2t</sub> + NO <sub>3t</sub>	NO <sub>2t</sub>	NH <sub>3t</sub>	P <sub>t</sub>	PO <sub>4t</sub>	FC	E. coli	FS	Alk <sub>(H)</sub>
<b>Poultry wells sampled in May 2000</b>																		
1	--	P	05/02/2000	P1	--	15.4	377	0	7.45	<0.02	<.01	.02	<.020	<.010	<1	<1	<1	196
2	--	P	05/04/2000	P1	--	15.2	404	.8	7.51	1.0	<.01	<.01	<.020	<.010	<1	<1	<1	212
3	--	P	05/05/2000	P1	--	15.6	436	5.3	7.38	.04	<.01	.01	<.020	<.010	<1	--	<1	220
4	--	P	05/03/2000	P1	--	14.9	354	7.5	6.97	8.5	<.01	<.01	<.020	<.010	<1	<1	<1	110
5	--	P	05/09/2000	P1	--	15.9	255	0	7.84	<.02	<.01	.03	<.020	<.010	<1	<1	1	126
6	--	P(old)	05/05/2000	*	--	15.9	250	.2	7.88	.05	<.01	.02	<.020	<.010	<1	<1	3	120
7	--	P	05/05/2000	P1	--	16.4	248	.9	7.95	<.02	<.01	.02	<.020	<.010	<1	<1	48	124
8	--	P(deep)	05/03/2000	*	--	15.8	331	0	7.68	<.02	<.01	<.01	<.020	<.010	<1	<1	<1	167
9	--	P(old)	05/04/2000	*	--	15.2	410	6.4	7.53	2.2	<.01	<.01	<.020	<.010	<1	<1	<1	202
10	--	P(old)	05/03/2000	*	--	15.3	323	5.6	7.19	4.3	<.01	.05	<.020	<.010	<1	<1	4	123
11	--	P	05/03/2000	P1	--	15.0	472	1.4	7.35	7.5	<.01	<.01	<.020	<.010	<1	<1	<1	180
12	--	P(old)	05/04/2000	*	--	16.3	280	.6	7.80	<.02	<.01	.08	<.020	<.010	<1	<1	<1	143
13	--	P	05/02/2000	P1	--	15.4	387	5.1	7.38	.10	<.01	.22	<.020	.190	<1	<1	<1	200
14	--	P	05/02/2000	P1	--	15.1	233	7.1	6.85	2.3	<.01	.02	<.020	<.010	<1	1	<1	104
15	--	P	05/04/2000	P1	--	15.3	483	5.2	7.34	5.8	<.01	<.01	<.020	<.010	<1	<1	<1	223
16	--	P	05/09/2000	P1	--	15.3	320	0	7.67	<.02	<.01	.04	<.020	<.010	<1	<1	3	168
17	--	P	05/04/2000	P1	--	16.4	326	.5	7.72	<.02	<.01	.02	<.020	<.010	<1	<1	<1	170
18	--	P	05/10/2000	P1	--	16.3	348	3.3	7.54	.28	<.01	.04	<.020	<.010	<1	<1	<1	176
20	--	P	05/18/2000	P1	--	16.2	249	.1	7.63	<.02	<.01	<.01	<.020	<.010	<1	<1	<1	124
23	--	P	05/10/2000	P1	--	15.3	557	7.2	7.03	18	<.01	.01	.030	.040	72	140	77	204
25	--	P	05/12/2000	P1	--	15.1	347	--	7.02	1.5	<.01	.02	<.020	<.010	--	--	--	170
25	--	P	05/17/2000	P1	--	--	--	--	--	--	--	--	--	--	<1	<1	1	--
26	--	P	05/16/2000	P1	--	15.7	322	7.1	7.56	1.6	<.01	<.01	.030	.030	<1	<1	<1	156
28	--	P	05/16/2000	P1	--	15.3	408	3.3	7.50	<.02	<.01	<.01	<.020	<.010	<1	<1	<1	219
31	--	P	05/17/2000	P1	--	15.2	489	8.8	7.18	6.6	<.01	<.01	<.020	<.010	<1	<1	<1	218

**Table 2.** Site type, sample group, physical properties, concentrations of chemical constituents, fecal indicator bacteria densities, and nitrogen isotopic composition in water samples from wells and springs—Continued

Well or spring number (fig. 3)	Spring name	Site type	Sample date (mm/dd/yyyy)	Sample group	Q	T	SC	DO	pH	NO <sub>2t</sub> + NO <sub>3t</sub>	NO <sub>2t</sub>	NH <sub>3t</sub>	P <sub>t</sub>	PO <sub>4t</sub>	FC	E. coli	FS	Alk <sub>(H)</sub>
<b>Poultry wells sampled in May 2000—Continued</b>																		
37	--	P(deep)	05/11/2000	*	--	16.0	310	1.0	7.69	0.3	<0.01	0.01	<0.020	<0.010	<1	<1	<1	152
39	--	P	05/10/2000	P1	--	15.8	274	.2	7.64	.14	<.01	.04	<.020	<.010	<1	1	2	139
42	--	P	05/09/2000	P1	--	17.1	381	4.4	7.29	1.6	<.01	.02	<.020	<.010	<1	<1	<1	194
43	--	P	05/10/2000	P1	--	15.9	240	7.2	7.87	5.1	<.01	<.01	<.020	<.010	<1	<1	7	117
45	--	P	05/18/2000	P1	--	16.9	443	4.2	7.41	4.0	<.01	<.01	<.020	<.010	<1	<1	<1	220
46	--	P	05/16/2000	P1	--	16.1	327	0	7.60	<.02	<.01	<.01	<.020	<.010	<1	<1	1	165
47	--	P	05/10/2000	P1	--	15.7	321	.2	7.69	<.02	<.01	.03	<.020	<.010	<1	<1	<1	160
<b>Poultry wells sampled in October or November 2000</b>																		
1	--	P	10/04/2000	P2	--	15.6	392	0	7.50	<0.02	<0.01	<0.01	<0.020	<0.010	<1	<1	<1	211
2	--	P	10/05/2000	P2	--	15.2	419	.5	7.46	.72	<.01	.02	<.020	<.010	<1	<1	<1	213
4	--	P	11/03/2000	P2	--	15.0	366	6.7	6.91	8.4	<.01	.02	<.020	.010	--	--	--	--
7	--	P	10/04/2000	P2	--	18.1	260	.3	7.90	<.02	<.01	.02	<.020	<.010	<1	<1	<1	127
14	--	P	10/04/2000	P2	--	15.8	250	4.5	6.97	2.3	<.01	.02	<.020	<.010	<1	<1	<1	111
15	--	P	11/02/2000	P2	--	15.3	497	4.8	7.31	5.4	.01	.03	<.020	<.010	--	--	--	--
16	--	P	10/04/2000	P2	--	15.7	332	0	7.69	<.02	<.01	.01	<.020	<.010	<1	<1	<1	173
23	--	P	10/03/2000	P2	--	15.3	568	5.5	6.98	17	<.01	.01	<.020	.030	<1	<1	2	217
23	--	P	11/02/2000	*	--	15.3	565	7.0	7.03	16	.01	.03	.020	.020	<1	2	1	--
39	--	P	10/04/2000	P2	--	16.3	277	--	7.71	.05	<.01	.04	<.020	<.010	<1	<1	<1	136
43	--	P	10/03/2000	P2	--	15.9	250	5.0	7.80	2.0	<.01	<.01	<.020	<.010	<1	<1	59	122
45	--	P	11/03/2000	P2	--	16.3	490	6.9	7.46	5.5	<.01	<.01	<.020	.010	--	--	--	--
46	--	P	10/05/2000	P2	--	16.0	338	.5	7.63	<.02	<.01	.02	<.020	<.010	<1	<1	<1	176

**Table 2.** Site type, sample group, physical properties, concentrations of chemical constituents, fecal indicator bacteria densities, and nitrogen isotopic composition in water samples from wells and springs—Continued

**Table 2.** Site type, sample group, physical properties, concentrations of chemical constituents, fecal indicator bacteria densities, and nitrogen isotopic composition in water samples from wells and springs—Continued

Well or spring number (fig. 3)	Spring name	Site type	Sample date (mm/dd/yyyy)	Sample group	HCO <sub>3</sub> (ft)	CO <sub>3</sub> (ft)	Solids	Hard	Ca	Mg	K	Na	Cl	F	SO <sub>4</sub>	B	Sr	δ <sup>15</sup> N
<b>Poultry wells sampled in May 2000—Continued</b>																		
37	--	P(deep)	05/11/2000	*	185	0	--	--	--	--	--	--	--	--	--	--	--	--
39	--	P	05/10/2000	P1	170	0	--	--	--	--	--	--	--	--	--	--	--	--
42	--	P	05/09/2000	P1	237	0	--	--	--	--	--	--	--	--	--	--	--	--
43	--	P	05/10/2000	P1	143	0	--	--	--	--	--	--	--	--	--	--	--	--
45	--	P	05/18/2000	P1	269	0	221	230	54	22	0.6	3.7	7.1	<0.10	1.8	4.9	27	--
46	--	P	05/16/2000	P1	201	0	--	--	--	--	--	--	--	--	--	--	--	--
47	--	P	05/10/2000	P1	195	0	175	160	44	12	.8	6.7	2.0	.12	13	8.8	270	--
<b>Poultry wells sampled in October or November 2000</b>																		
1	--	P	10/04/2000	P2	258	0	207	200	53	17	0.4	2.6	2.4	<0.10	4.8	3.5	48	--
2	--	P	10/05/2000	P2	260	0	217	220	53	21	.5	2.7	2.6	<.10	9.7	5.4	59	--
4	--	P	11/03/2000	P2	--	--	--	--	--	--	--	--	--	<.10	--	--	--	5.4
7	--	P	10/04/2000	P2	155	0	133	120	28	13	1.7	3.1	1.2	.13	9.9	22	90	--
14	--	P	10/04/2000	P2	135	0	59	110	43	1.2	.3	5.1	6.9	<.10	.6	2.9	22	--
15	--	P	11/02/2000	P2	--	--	--	--	--	--	--	--	--	--	--	--	--	9.1
16	--	P	10/04/2000	P2	211	0	174	170	41	16	1.5	2.7	2.0	<.10	7.1	12	66	--
23	--	P	10/03/2000	P2	265	0	256	260	100	1.6	.8	7.4	14	<.10	1.8	4.7	59	--
23	--	P	11/02/2000	*	--	--	--	--	--	--	--	--	--	--	--	--	--	7.9
39	--	P	10/04/2000	P2	166	0	142	140	32	14	1.9	3.3	1.3	.14	7.9	22	100	--
43	--	P	10/03/2000	P2	148	0	124	120	39	6.5	.3	1.9	1.9	<.10	1.8	4.7	47	--
45	--	P	11/03/2000	P2	--	--	--	--	--	--	--	--	--	--	--	--	--	7.8
46	--	P	10/05/2000	P2	214	0	181	170	40	18	1.3	2.4	2.0	<.10	12	9.5	54	--

**Table 2.** Site type, sample group, physical properties, concentrations of chemical constituents, fecal indicator bacteria densities, and nitrogen isotopic composition in water samples from wells and springs—Continued

Well or spring number (fig. 3)	Spring name	Site type	Sample date (mm/dd/yyyy)	Sample group	Q	T	SC	DO	pH	$\text{NO}_{2\text{t}} + \text{NO}_{3\text{t}}$	$\text{NO}_{2\text{t}}$	$\text{NH}_{3\text{t}}$	$P_t$	$\text{PO}_{4\text{t}}$	FC	<i>E. coli</i>	FS	Alk( $\text{H}_2\text{O}$ )
<b>Agriculture wells sampled in May 2000</b>																		
19	--	Ag(deep)	05/17/2000	*	--	15.8	274	0	7.68	<0.02	<0.01	0.01	<0.020	<0.010	<1	<1	1	137
21	--	Ag	05/18/2000	Ag1	--	15.7	428	--	7.41	4.6	<.01	<.01	<.020	<.010	<1	<1	<1	193
22	--	Ag	05/18/2000	Ag1	--	16.5	503	.1	7.22	<.02	<.01	<.01	<.020	<.010	<1	<1	<1	280
24	--	Ag	05/17/2000	Ag1	--	15.2	338	8.1	7.33	3.1	<.01	<.01	<.020	<.010	<1	<1	<1	174
27	--	Ag	05/16/2000	Ag1	--	13.9	396	--	6.42	3.0	<.01	<.01	.030	.020	32	<1	90	127
29	--	Ag	05/17/2000	Ag1	--	15.2	266	6.8	7.46	1.0	<.01	<.01	<.020	<.010	1	<1	1	131
30	--	Ag	05/17/2000	Ag1	--	15.4	349	7.4	7.49	6.1	<.01	<.01	<.020	<.010	<1	<1	<1	156
32	--	Ag	05/17/2000	Ag1	--	15.4	408	3.3	6.78	5.3	<.01	<.01	.030	.030	<1	--	12	190
33	--	Ag	05/17/2000	Ag1	--	14.9	260	6.4	6.71	2.6	<.01	<.01	.020	<.010	81	--	130	109
34	--	Ag	05/11/2000	Ag1	--	15.8	278	8.4	7.37	2.7	<.01	.01	<.020	<.010	<1	<1	1	134
35	--	Ag	05/11/2000	Ag1	--	15.6	410	8.1	7.29	5.5	<.01	.02	<.020	<.010	<1	<1	<1	185
36	--	Ag	05/11/2000	Ag1	--	15.4	504	6.2	7.11	6.1	<.01	.01	<.020	<.010	<1	<1	<1	243
38	--	Ag	05/03/2000	Ag1	--	14.8	431	5.9	7.26	4.5	<.01	<.01	.030	.030	<1	<1	<1	200
40	--	Ag	05/12/2000	Ag1	--	15.2	270	--	7.04	5.2	<.01	.01	<.020	.020	12	45	110	113
41	--	Ag	05/12/2000	Ag1	--	15.1	506	4.4	7.30	12	<.01	.01	<.020	<.010	<1	<1	<1	211
44	--	Ag	05/17/2000	Ag1	--	15.5	468	9.0	7.26	10	<.01	<.01	.020	<.010	4	<1	<1	167
<b>Agriculture wells sampled in October or November 2000</b>																		
27	--	Ag	10/05/2000	Ag2	--	18.8	373	--	6.61	1.8	<.01	0.03	<.020	0.040	15	15	150	146
29	--	Ag	10/05/2000	Ag2	--	15.1	273	--	7.60	.96	<.01	.02	<.020	<.010	<1	<1	7	135
33	--	Ag	10/03/2000	Ag2	--	15.1	415	3.5	6.92	6.4	<.01	<.01	<.020	.030	4	11	9	180
38	--	Ag	11/02/2000	Ag2	--	15.4	448	6.0	7.26	4.4	.01	.04	<.020	.020	--	--	--	--
40	--	Ag	10/03/2000	Ag2	--	15.6	318	4.5	6.86	6.3	<.01	<.01	<.020	.040	11	11	5	125
41	--	Ag	10/03/2000	Ag2	--	15.2	540	3.0	7.26	13	<.01	.02	<.020	.020	<1	<1	<1	216
41	--	Ag	11/03/2000	*	--	15.0	540	4.2	7.30	13	<.01	.04	<.020	.020	--	--	--	--
44	--	Ag	10/05/2000	Ag2	--	18.1	512	--	7.26	9.6	<.01	.02	<.020	.020	<1	<1	3	185

**Table 2.** Site type, sample group, physical properties, concentrations of chemical constituents, fecal indicator bacteria densities, and nitrogen isotopic composition in water samples from wells and springs—Continued

Well or spring number (fig. 3)	Spring name	Site type	Sample date (mm/dd/yyyy)	Sample group	HCO <sub>3</sub> (it)	CO <sub>3</sub> (it)	Solids	Hard	Ca	Mg	K	Na	Cl	F	SO <sub>4</sub>	B	Sr	δ <sup>15</sup> N
<b>Agriculture wells sampled in May 2000</b>																		
19	--	Ag(deep)	05/17/2000	*	167	0	147	140	31	14	2.0	3.4	1.0	0.16	13	31	160	--
21	--	Ag	05/18/2000	Ag1	235	0	--	--	--	--	--	--	--	--	--	--	--	--
22	--	Ag	05/18/2000	Ag1	342	0	--	--	--	--	--	--	--	--	--	--	--	--
24	--	Ag	05/17/2000	Ag1	212	0	--	--	--	--	--	--	--	--	--	--	--	--
27	--	Ag	05/16/2000	Ag1	155	0	207	170	59	4.8	6.9	9.4	22	<.10	29	38	120	--
29	--	Ag	05/17/2000	Ag1	160	0	--	--	--	--	--	--	--	--	--	--	--	--
30	--	Ag	05/17/2000	Ag1	191	0	172	170	61	4.7	.9	3.2	3.6	<.10	4.8	4.9	56	--
32	--	Ag	05/17/2000	Ag1	231	0	--	--	--	--	--	--	--	--	--	--	--	--
33	--	Ag	05/17/2000	Ag1	133	0	--	--	--	--	--	--	--	--	--	--	--	--
34	--	Ag	05/11/2000	Ag1	163	0	143	140	53	1.2	.6	2.4	4.9	<.10	.8	4.7	28	--
35	--	Ag	05/11/2000	Ag1	226	0	206	210	80	1.9	.7	2.6	7.4	<.10	2.6	5.4	46	--
36	--	Ag	05/11/2000	Ag1	297	0	--	--	--	--	--	--	--	--	--	--	--	--
38	--	Ag	05/03/2000	Ag1	244	0	--	--	--	--	--	--	--	--	--	--	--	--
40	--	Ag	05/12/2000	Ag1	138	0	--	--	--	--	--	--	--	--	--	--	--	--
41	--	Ag	05/12/2000	Ag1	258	0	241	260	86	11	1.3	2.6	9.6	<.10	3.4	6.9	53	--
44	--	Ag	05/17/2000	Ag1	204	0	229	210	77	3.3	1.6	12	27	<.10	7.5	7.4	73	--
<b>Agriculture wells sampled in October or November 2000</b>																		
27	--	Ag	10/05/2000	Ag2	178	0	196	160	58	4.0	5.4	8.9	13	<.10	19	37	110	--
29	--	Ag	10/05/2000	Ag2	164	0	141	130	47	3.8	.5	2.6	1.3	<.10	5.1	5.0	41	--
33	--	Ag	10/03/2000	Ag2	219	0	200	190	72	3.1	1.9	4.5	9.8	<.10	1.4	6.4	68	--
38	--	Ag	11/02/2000	Ag2	--	--	--	--	--	--	--	--	--	--	--	--	7.4	--
40	--	Ag	10/03/2000	Ag2	152	0	149	140	55	1.3	1.0	6.3	9.8	<.10	1.3	5.3	38	--
41	--	Ag	10/03/2000	Ag2	263	0	247	260	86	11	1.4	3.9	11	<.10	4.3	6.7	56	--
41	--	Ag	11/03/2000	*	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--

**Table 2.** Site type, sample group, physical properties, concentrations of chemical constituents, fecal indicator bacteria densities, and nitrogen isotopic composition in water samples from wells and springs—Continued

	44	--	Ag	10/05/2000	Ag2	226	0	243	220	84	3.2	1.6	12	24	<.10	7.4	6.6	69	--
Well or spring number (fig. 3)	Spring name	Site type	Sample date (mm/dd/yyyy)	Sample group	Q	T	SC	DO	pH	NO <sub>2t</sub> + NO <sub>3t</sub>	NO <sub>2t</sub>	NH <sub>3t</sub>	P <sub>t</sub>	PO <sub>4t</sub>	FC	E. coli	FS	Alk <sub>(H)</sub>	
<b>Springs sampled in May 2000</b>																			
48	Dilbeck Spring	Sp	05/04/2000	Sp1	1.2	14.0	385	2.6	6.50	5.2	<0.01	0.01	<0.020	0.020	20	--	52	114	
49	Fly Spring	Sp	05/10/2000	Sp1	1.9	13.5	312	6.3	6.97	4.0	<.01	.02	<.020	.010	1,300	2,700	2,100	126	
50	Hawkins Spring	Sp	05/12/2000	Sp1	7.6	14.7	364	6.3	7.05	3.5	<.01	<.01	.030	.040	400	400	100	154	
51	Hill Spring	Sp	05/11/2000	Sp1	.25	14.5	323	6.7	6.90	5.0	<.01	.02	.140	.030	3,300	2,100	3,100	136	
52	Renkoski Spring	Sp	05/10/2000	Sp1	1.7	14.0	347	7.3	6.70	6.4	<.01	.02	.050	.060	2,700	--	>1,000	141	
53	Roller Spring	Sp	05/11/2000	Sp1	4.4	--	298	11.6	7.38	3.7	.01	.04	<.020	<.010	<100	--	300	125	
54	Talbert Spring	Sp	05/03/2000	Sp1	.6	14.1	308	3.0	6.92	2.9	<.01	.02	<.020	.010	12	40	42	125	
55	Zerbert Spring	Sp	05/11/2000	Sp1	1.3	16.5	294	5.9	6.96	3.1	<.01	.03	<.020	.020	470	1,100	590	130	
<b>Springs sampled in October or November 2000</b>																			
48	Dilbeck Spring	Sp	10/02/2000	Sp2	0.98	14.6	374	3.0	6.58	6.4	0.01	0.04	<0.020	0.030	6	20	16	124	
49	Fly Spring	Sp	10/02/2000	Sp2	1.1	15.9	278	6.0	6.89	4.1	.01	.05	<.020	.020	220	520	260	129	
50	Hawkins Spring	Sp	10/03/2000	Sp2	2.5	15.0	379	4.5	6.96	3.6	<.01	.02	.040	.050	200	33	<100	169	
50	Hawkins Spring	Sp	11/03/2000	*	2.0	14.9	376	5.5	7.04	3.3	<.01	.04	.040	.050	--	--	--	--	
51	Hill Spring	Sp	10/03/2000	Sp2	--	15.1	420	4.5	6.88	5.9	<.01	.02	<.020	.030	840	2,000	120	180	
52	Renkoski Spring	Sp	10/04/2000	Sp2	.8	15.5	382	4.5	6.92	4.7	<.01	.02	<.020	.020	40	47	30	183	
53	Roller Spring	Sp	10/04/2000	Sp2	2.4	15.9	351	5.0	7.09	3.3	.02	.05	<.020	.010	60	33	<20	149	
53	Roller Spring	Sp	11/03/2000	*	3.1	14.4	342	6.2	7.07	3.2	.02	.06	<.020	.010	--	--	--	--	
54	Talbert Spring	Sp	10/02/2000	Sp2	.5	15.8	335	5.5	7.12	2.7	.01	.04	<.020	.030	<2	16	24	142	
55	Zerbert Spring	Sp	10/03/2000	Sp2	.5	16.9	352	4.5	6.87	3.8	<.01	<.01	<.020	.030	40	20	40	160	

**Table 2.** Site type, sample group, physical properties, concentrations of chemical constituents, fecal indicator bacteria densities, and nitrogen isotopic composition in water samples from wells and springs—Continued

Well or spring number (fig. 3)	Spring name	Site type	Sample date (mm/dd/yyyy)	Sample group	HCO <sub>3</sub> (it)	CO <sub>3</sub> (it)	Solids	Hard	Ca	Mg	K	Na	Cl	F	SO <sub>4</sub>	B	Sr	δ <sup>15</sup> N
<b>Springs sampled in May 2000</b>																		
48	Dilbeck Spring	Sp	05/04/2000	Sp1	139	0	192	150	54	3.6	1.8	19	41	<0.10	4.2	4.9	68	--
49	Fly Spring	Sp	05/10/2000	Sp1	154	0	153	140	52	2.6	1.6	6.2	12	<.10	2.6	5.6	40	--
50	Hawkins Spring	Sp	05/12/2000	Sp1	188	0	186	170	58	6.2	1.8	7.2	14	<.10	6.5	8.2	50	--
51	Hill Spring	Sp	05/11/2000	Sp1	166	0	160	150	58	2.0	2.0	3.6	8.3	<.10	4.1	6.5	50	--
52	Renkoski Spring	Sp	05/10/2000	Sp1	172	0	172	160	63	1.7	3.1	4.7	10	<.10	4.4	7.0	50	--
53	Roller Spring	Sp	05/11/2000	Sp1	153	0	147	140	53	2.2	1.4	3.9	8.5	<.10	3.1	5.9	42	--
54	Talbert Spring	Sp	05/03/2000	Sp1	153	0	152	150	56	1.7	1.0	5.6	11	<.10	1.9	4.8	36	--
55	Zerbert Spring	Sp	05/11/2000	Sp1	158	0	146	140	53	1.6	1.5	2.8	7.0	<.10	2.8	5.8	43	--
<b>Springs sampled in October or November 2000</b>																		
48	Dilbeck Spring	Sp	10/02/2000	Sp2	151	0	201	150	54	3.7	1.8	20	43	<0.10	4.0	6.6	65	--
49	Fly Spring	Sp	10/02/2000	Sp2	158	0	156	140	52	3.3	1.5	6.3	12	<.10	2.7	5.3	41	--
50	Hawkins Spring	Sp	10/03/2000	Sp2	206	0	191	170	59	6.3	1.5	5.9	11	<.10	5.8	8.5	51	--
50	Hawkins Spring	Sp	11/03/2000	*	--	--	--	--	--	--	--	--	--	--	--	--	5.2	
51	Hill Spring	Sp	10/03/2000	Sp2	220	0	203	200	76	2.4	1.4	4.7	7.9	<.10	2.5	5.8	56	--
52	Renkoski Spring	Sp	10/04/2000	Sp2	224	0	198	180	71	1.3	.9	4.7	8.1	<.10	1.8	5.2	46	--
53	Roller Spring	Sp	10/04/2000	Sp2	182	0	170	160	61	2.5	1.1	4.4	8.7	<.10	2.4	5.3	44	--
53	Roller Spring	Sp	11/03/2000	*	--	--	--	--	--	--	--	--	--	--	--	--	5.8	
54	Talbert Spring	Sp	10/02/2000	Sp2	173	0	166	150	57	1.7	1.0	7	12	<.10	1.7	5.9	36	--
55	Zerbert Spring	Sp	10/03/2000	Sp2	195	0	175	170	64	1.6	1.0	3.5	7.5	<.10	1.8	4.6	43	--

**Table 3.** Summary statistics of physical properties, concentrations of chemical constituents, and fecal indicator bacteria densities for sample groups

Site type	Sample group	T	SC	DO	pH	NO <sub>2t</sub> + NO <sub>3t</sub>	NO <sub>2t</sub>	NH <sub>3t</sub>	P <sub>t</sub>	PO <sub>4t</sub>	FC	E. coli	FS	AIK <sub>(it)</sub>
P	P1	N (samples)	25	25	24	25	25	25	25	25	25	24	25	25
		N (detections)	25	25	20	25	16	0	12	2	3	1	3	8
		Minimum	14.9	233	0	6.85	<.02	<.01	<.01	<.02	<.01	<1	<1	104
		Maximum	17.1	557	8.8	7.95	18	<.01	.22	.03	.19	72	140	77
		Median	15.6	348	3.3	7.50	.28	<.01	<.01	<.02	<.01	<1	<1	170
		Mean	15.7	360	3.3	7.46	2.6	<.01	.03	<.02	.02	3	6	6
P	P2	STD	.6	87	3.1	.29	4.2	0	.04	0	.04	14	29	18
		N (samples)	12	12	11	12	12	12	12	12	9	9	9	9
		N (detections)	12	12	9	12	8	0	7	0	3	0	0	2
		Minimum	15	250	0	6.91	<.02	<.01	<.01	<.02	<.01	<1	<1	111
		Maximum	18.1	568	6.9	7.90	17	<.01	.04	<.02	.03	<1	<1	59
		Median	15.8	352	4.5	7.48	1.4	<.01	.02	<.02	<.01	<1	<1	173
Ag	Ag1	Mean	15.9	369	3.2	7.44	3.5	<.01	.02	<.02	<.01	<1	<1	7
		STD	.8	106	2.9	.34	5.1	0	.01	0	.01	0	0	20
		N (samples)	15	15	12	15	15	15	15	15	15	13	15	15
		N (detections)	15	15	12	15	14	0	1	3	4	5	1	6
		Minimum	13.9	260	.1	6.42	<.02	<.01	<.01	<.02	<.01	<1	<1	109
		Maximum	16.5	506	9	7.49	12	<.01	.02	.03	.03	81	45	130
Ag	Ag2	Median	15.4	408	6.6	7.26	4.6	<.01	<.01	<.02	<.01	<1	<1	174
		Mean	15.3	388	6.2	7.16	4.8	<.01	<.01	<.02	<.01	9	3	23
		STD	.6	90	2.5	.31	3.1	0	0	0	.01	22	12	46
		N (samples)	7	7	4	7	7	7	7	7	6	6	6	6
		N (detections)	7	7	4	7	7	1	5	0	6	3	3	5
		Minimum	15.1	273	3	6.61	1.0	<.01	<.01	<.02	<.01	<1	<1	125
Sp	Sp1	Maximum	18.8	540	6.0	7.60	13	.01	.04	<.02	.04	15	15	150
		Median	15.4	415	4.0	7.26	6.3	<.01	.02	<.02	.02	2	6	6
		Mean	16.2	441	4.3	7.11	6.1	<.01	.02	<.02	.03	5	6	29
		STD	1.6	98	1.3	.33	4.2	0	.01	0	.01	7	7	59
		N (samples)	7	8	8	8	8	8	8	8	7	5	8	8
		N (detections)	7	8	8	8	8	1	7	3	8	7	5	8
Sp	Sp2	Minimum	13.5	294	2.6	6.50	2.9	<.01	<.01	<.02	<.01	12	40	42
		Maximum	16.5	385	11.6	7.38	6.4	.01	.04	.14	.06	3,300	2,700	3,100
		Median	14.1	318	6.3	6.94	3.9	<.01	.02	<.02	.02	470	1,100	445
		Mean	14.5	329	6.2	6.92	4.2	<.01	.02	.04	.03	1,172	1,268	911
		STD	1.0	33	2.8	.26	1.2	0	.01	.04	.02	1,332	1,122	1,124
		N (samples)	8	8	8	8	8	8	8	8	8	8	6	8
Sp	Sp2	N (detections)	8	8	8	8	8	4	7	1	8	7	8	6
		Minimum	14.6	278	3	6.58	2.7	<.01	<.01	<.02	.01	<1	16	16
		Maximum	16.9	420	6	7.12	6.4	.02	.05	.04	.05	840	2,000	260
		Median	15.7	363	4.5	6.91	4.0	.01	.03	<.02	.03	50	33	35
		Mean	15.6	359	4.7	6.91	4.3	.01	.03	<.02	.03	176	336	82
		STD	.7	42	.9	.17	1.3	0	.02	.01	.01	281	694	95

**Table 3.** Summary statistics of physical properties, concentrations of chemical constituents, and fecal indicator bacteria densities for sample groups—Continued

Site type	Sample group		HCO <sub>3</sub> (it)	CO <sub>3</sub> (it)	Solids	Hard	Ca	Mg	K	Na	Cl	F	SO <sub>4</sub>	B	Sr
P	P1	N (samples)	25	25	13	13	13	13	13	13	13	13	13	13	13
		N (detections)	25	25	13	13	13	13	13	13	1	13	13	13	13
		Minimum	127	0	131	130	30	1.8	.4	1.6	1.1	<.10	1.8	3.6	23
		Maximum	272	0	254	260	100	22	2.2	11	21	.12	14	11	270
		Median	207	0	179	180	51	13	1.1	3.7	4.2	<.10	7.2	6.3	51
		Mean	210	0	190	189	55	12.4	1.1	4.4	6.9	<.10	7.1	7.0	69
		STD	47	0	40	43	21	6.0	.5	3.1	6.6	.01	4.4	2.6	63
P	P2	N (samples)	9	9	9	9	9	9	9	9	9	9	9	9	9
		N (detections)	9	9	9	9	9	9	9	9	2	9	9	9	9
		Minimum	135	0	59	110	28	1.2	.3	1.9	1.2	<.10	.6	2.9	22
		Maximum	265	0	256	260	100	21	1.9	7.4	14	.14	12	22	100
		Median	211	0	174	170	41	14	.8	2.7	2.0	<.10	7.1	5.4	59
		Mean	201	0	166	168	48	12.0	1.0	3.5	3.8	.11	6.2	9.6	61
		STD	52	0	59	51	21	7.2	.6	1.7	4.2	.02	4.1	7.6	23
Ag	Ag1	N (samples)	15	15	6	6	6	6	6	6	6	6	6	6	6
		N (detections)	15	15	6	6	6	6	6	6	0	6	6	6	6
		Minimum	133	0	143	140	53	1.2	.6	2.4	3.6	<.10	.8	4.7	28
		Maximum	342	0	241	260	86	11	6.9	12	27	<.10	29	38	120
		Median	212	0	207	190	69	4	1.1	2.9	8.5	<.10	4.1	6.2	55
		Mean	213	0	200	193	69	4.5	2.0	5.4	12.4	<.10	8.0	11.2	63
		STD	59	0	36	42	13	3.5	2.4	4.2	9.7	0	10.5	13.2	32
Ag	Ag2	N (samples)	6	6	6	6	6	6	6	6	6	6	6	6	6
		N (detections)	6	6	6	6	6	6	6	6	0	6	6	6	6
		Minimum	152	0	141	130	47	1.3	.5	2.6	1.3	<.10	1.3	5	38
		Maximum	263	0	247	260	86	11	5.4	12	24	<.10	19	37	110
		Median	199	0	198	175	65	4	1.5	5.4	10.4	<.10	4.7	6.5	62
		Mean	200	0	196	183	67	4.4	2.0	6.4	11.5	<.10	6.4	11.2	64
		STD	43	0	45	50	16	3.4	1.8	3.5	7.3	0	6.6	12.7	26
Sp	Sp1	N (samples)	8	8	8	8	8	8	8	8	8	8	8	8	8
		N (detections)	8	8	8	8	8	8	8	8	0	8	8	8	8
		Minimum	139	0	146	140	52	1.6	1	2.8	7	<.10	1.9	4.8	36
		Maximum	188	0	192	170	63	6.2	3.1	19	41	<.10	6.5	8.2	68
		Median	156	0	157	150	55	2	1.7	5.2	10.5	<.10	3.6	5.9	47
		Mean	160	0	164	150	56	2.7	1.8	6.6	14.0	<.10	3.7	6.1	47
		STD	15	0	18	11	4	1.6	.6	5.2	11.1	0	1.4	1.1	10
Sp	Sp2	N (samples)	8	8	8	8	8	8	8	8	8	8	8	8	8
		N (detections)	8	8	8	8	8	8	8	8	0	8	8	8	8
		Minimum	151	0	156	140	52	1.3	.9	3.5	7.5	<.10	1.7	4.6	36
		Maximum	224	0	203	200	76	6.3	1.8	20	43	<.10	5.8	8.5	65
		Median	189	0	183	165	60	2	1.3	5.3	9.9	<.10	2.5	5.6	45
		Mean	189	0	183	165	62	2.9	1.3	7.1	13.8	<.10	2.8	5.9	48
		STD	27	0	18	19	8	1.6	.3	5.3	12.0	0	1.4	1.2	9

**Table 4.** Spearman's rank-order correlation coefficients for physical properties, concentrations of chemical constituents, and fecal indicator bacteria densities for combined P1 and Ag1 samples

	<b>SC</b>	<b>DO</b>	<b>pH</b>	<b>NO<sub>2t</sub> + NO<sub>3t</sub></b>	<b>NH<sub>3t</sub></b>	<b>P<sub>t</sub></b>	<b>PO<sub>4t</sub></b>	<b>FC</b>	<b>E. coli</b>	<b>FS</b>	<b>Alk<sub>(it)</sub></b>	<b>HCO<sub>3(it)</sub></b>
SC	1											
DO	.361	1										
pH	-.738	-.723	1									
NO <sub>2t</sub> + NO <sub>3t</sub>	.776	.708	-.868	1								
NH <sub>3t</sub>	-.360	-.524	.522	-.68	1							
P <sub>t</sub>	.170	.205	-.136	.243	-.272	1						
PO <sub>4t</sub>	.202	.180	-.141	.128	.092	.734	1					
FC	.450	.400	-.478	.524	-.272	.468	.340	1				
<i>E. coli</i>	.397	.164	-.351	.405	-.187	.686	.540	.728	1			
FS	-.213	-.098	.084	-.057	.176	.304	.177	.331	.546	1		
Alk <sub>(it)</sub>	.782	-.040	-.308	.286	.020	.051	.199	.149	.257	-.122	1	
HCO <sub>3(it)</sub>	.783	-.038	-.309	.291	.020	.034	.186	.149	.257	-.122	.999	1
Solids	.948	.216	-.558	.602	-.208	.102	.148	.414	.351	-.189	.881	.882
Hard	.954	.201	-.578	.622	-.221	.120	.195	.370	.376	-.145	.911	.913
Ca	.894	.601	-.852	.871	-.511	.170	.075	.450	.398	-.138	.568	.574
Mg	-.234	-.773	.653	-.656	.526	-.273	.011	-.415	-.352	-.214	.214	.211
K	.087	-.171	.001	.208	-.084	-.102	-.334	.353	.187	.299	-.134	-.127
Na	.529	.512	-.566	.700	-.541	.273	-.033	.471	.258	-.124	.078	.075
Cl	.774	.723	-.888	.894	-.622	.205	.122	.471	.257	-.229	.305	.301
F	-.210	-.211	.304	-.286	.320	-.086	-.108	-.086	-.059	-.128	-.117	-.117
SO <sub>4</sub>	-.252	-.515	.546	-.389	.239	-.222	-.299	-.139	-.327	-.236	-.213	-.214
B	-.237	-.425	.476	-.307	.268	-.119	-.299	.077	-.047	.209	-.083	-.085
Sr	.133	-.275	.202	-.023	.361	-.153	-.118	.320	.187	.136	.096	.106
	<b>Solids</b>	<b>Hard</b>	<b>Ca</b>	<b>Mg</b>	<b>K</b>	<b>Na</b>	<b>Cl</b>	<b>F</b>	<b>SO<sub>4</sub></b>	<b>B</b>	<b>Sr</b>	
SC												
DO												
pH												
NO <sub>2t</sub> + NO <sub>3t</sub>												
NH <sub>3t</sub>												
P <sub>t</sub>												
PO <sub>4t</sub>												
FC												
<i>E. coli</i>												
FS												
Alk <sub>(it)</sub>												
HCO <sub>3(it)</sub>												
Solids	1											
Hard	.969	1										
Ca	.803	.786	1									
Mg	-.106	-.043	-.600	1								
K	.117	.088	.026	-.096	1							
Na	.456	.358	.594	-.543	.289	1						
Cl	.630	.606	.808	-.575	.132	.797	1					
F	-.070	-.212	-.210	.070	-.094	.211	-.210	1				
SO <sub>4</sub>	-.086	-.235	-.377	.328	.505	.029	-.289	.351	1			
B	-.036	-.120	-.345	.212	.682	-.050	-.307	.258	.711	1		
Sr	.289	.177	.007	.100	.680	.195	-.057	.398	.636	.622	1	

**Table 5.** Spearman's rank-order correlation coefficients for physical properties, concentrations of chemical constituents, and fecal indicator bacteria densities for Sp1 samples

	SC	DO	pH	NO <sub>2t</sub> + NO <sub>3t</sub>	NH <sub>3t</sub>	P <sub>t</sub>	PO <sub>4t</sub>	FC	E. coli	FS	Alk <sub>(it)</sub>	HCO <sub>3(it)</sub>
SC	1											
DO	.718	1										
pH	.300	-.051	1									
NO <sub>2t</sub> + NO <sub>3t</sub>	.600	.975	-.100	1								
NH <sub>3t</sub>	-.894	-.344	-.447	-.224	1							
P <sub>t</sub>	.783	.803	-.224	.671	-.500	1						
PO <sub>4t</sub>	.667	.553	.205	.359	-.459	.803	1					
FC	.200	.821	-.300	.900	.224	.447	.154	1				
E. coli	.100	.667	0	.800	.224	.112	-.103	.900	1			
FS	.200	.821	-.300	.900	.224	.447	.154	1	.900	1		
Alk <sub>(it)</sub>	.700	.667	.300	.500	-.447	.783	.975	.300	.100	.300	1	
HCO <sub>3(it)</sub>	.700	.667	.300	.500	-.447	.783	.975	.300	.100	.300	1	1
Solids	1	.718	.300	.600	-.894	.783	.667	.200	.100	.200	.700	.700
Hard	.738	.189	.105	0	-.825	.648	.649	-.369	-.580	-.369	.527	.527
Ca	.667	.395	-.205	.205	-.574	.860	.789	-.051	-.410	-.051	.667	.667
Mg	.900	.564	.600	.500	-.894	.447	.410	.100	.200	.100	.500	.500
K	.800	.975	0	.900	-.447	.894	.718	.700	.500	.700	.800	.800
Na	.700	.154	.700	.100	-.894	.112	.154	-.300	-.100	-.300	.200	.200
Cl	.700	.154	.700	.100	-.894	.112	.154	-.300	-.100	-.300	.200	.200
F	--	--	--	--	--	--	--	--	--	--	--	--
SO <sub>4</sub>	.700	.667	.300	.500	-.447	.783	.975	.300	.100	.300	1	1
B	.700	.667	.300	.500	-.447	.783	.975	.300	.100	.300	1	1
Sr	.667	.763	.103	.616	-.344	.860	.947	.462	.205	.462	.975	.975

  

	Solids	Hard	Ca	Mg	K	Na	Cl	F	SO <sub>4</sub>	B	Sr
SC											
DO											
pH											
NO <sub>2t</sub> + NO <sub>3t</sub>											
NH <sub>3t</sub>											
P <sub>t</sub>											
PO <sub>4t</sub>											
FC											
E. coli											
FS											
Alk <sub>(it)</sub>											
HCO <sub>3(it)</sub>											
Solids	1										
Hard	.738	1									
Ca	.667	.892	1								
Mg	.900	.527	.308	1							
K	.800	.369	.564	.600	1						
Na	.700	.527	.154	.900	.200	1					
Cl	.700	.527	.154	.900	.200	1	1				
F	--	--	--	--	--	--	--	--			
SO <sub>4</sub>	.700	.527	.667	.500	.800	.200	.200	--	1		
B	.700	.527	.667	.500	.800	.200	.200	--	1	1	
Sr	.667	.460	.684	.410	.872	.051	.051	--	.975	.975	1